

CONTINUING MEDICAL EDUCATION ΣΥΝΕΧΙΖΟΜΕΝΗ ΙΑΤΡΙΚΗ ΕΚΠΑΙΔΕΥΣΗ

Pediatric Radiology Quiz – Case 5

An 8-year-old girl presented to the Emergency Department of our hospital complaining for abdominal pain. Clinical examination revealed a hypogastric mass and the patient was referred for ultrasonography (US), which showed a large lobulated mass in lower pelvis, with cystic and solid components displacing downwards the bladder (figures 1, 2). A small fluid collection in lower peritoneal recesses was also noticed. Subsequently, the

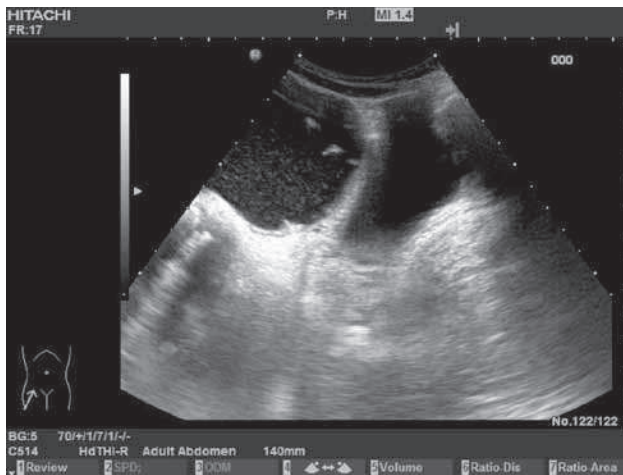


Figure 1. Ultrasound of lower abdomen (sagittal view): A cystic mass with internal septa that displaces smoothly downwards the bladder.

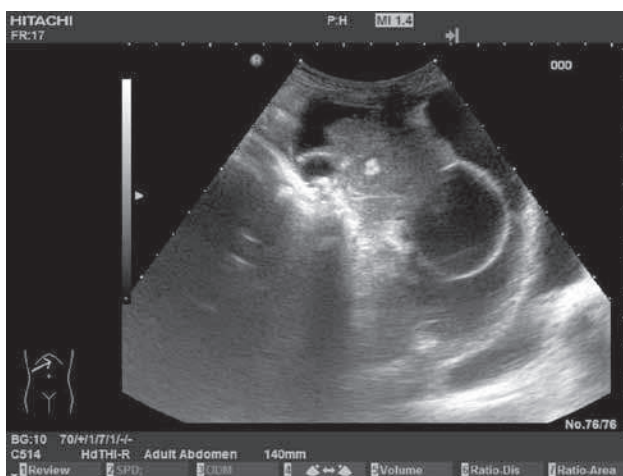


Figure 2. Ultrasound of lower abdomen (oblique view): A lobulated mass with internal septa, cystic and solid component with internal calcified foci.

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ΑΡΧΕΙΑ ΕΛΛΗΝΙΚΗΣ ΙΑΤΡΙΚΗΣ 2014, 31(2):252–253

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patient was referred by surgeons to our Computed Tomography (CT) Department. Non-enhanced (NECT) and contrast enhanced CT scan (CECT) showed a large, well-defined mass occupying the pelvis, displacing smoothly the adjacent structures and the iliac vessels. The mass had solid (with internal foci of fat and calcifications) and cystic component. Its solid part presented mild homogenous contrast enhancement (figures 3, 4a, 4b). Radiologic differential diagnosis was suggestive of immature cystic teratoma arising from left ovary. Surgical excision and



Figure 3. Abdomen CECT (axial view): A circumscribed, middle line pelvic mass with cystic and solid component that has internal foci of fat and calcifications. Note the displacement of iliac vessels bilaterally.

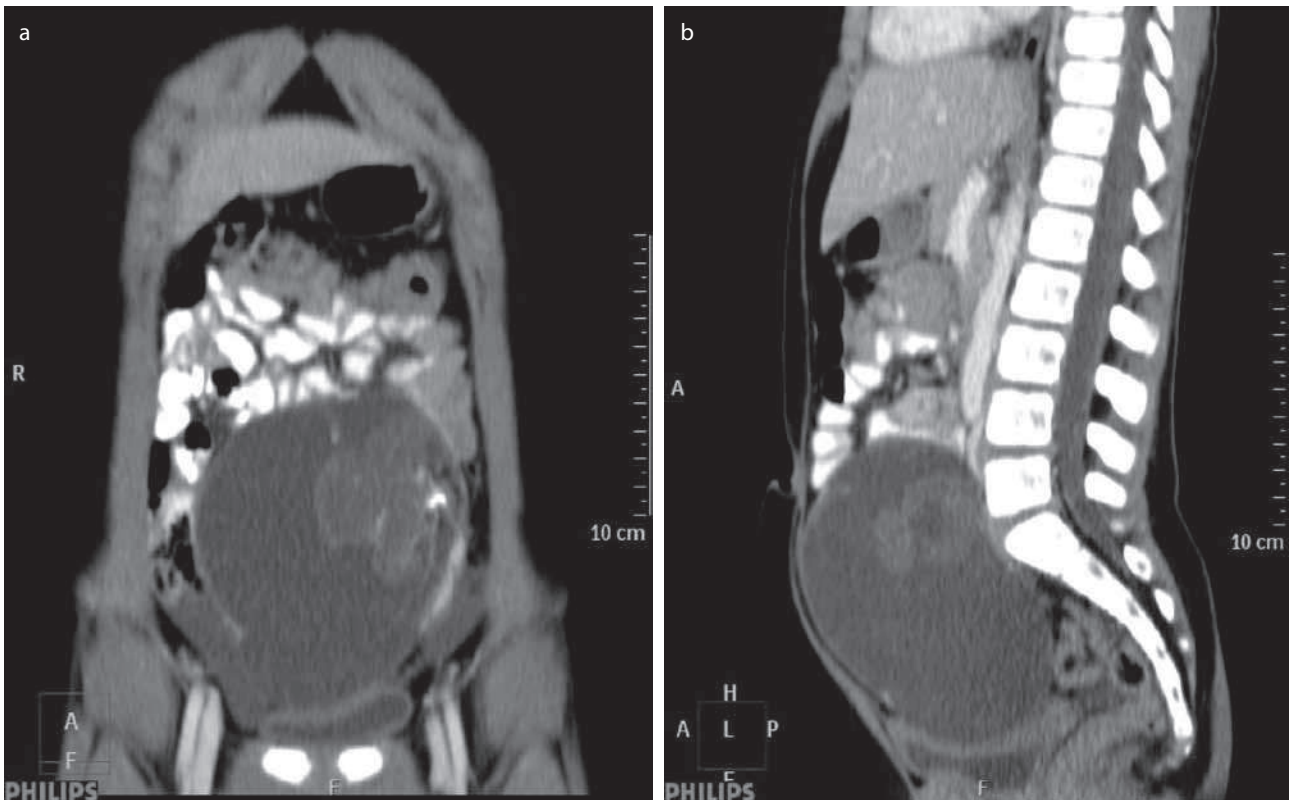


Figure 4a, b. Abdomen CECT: A circumscribed pelvic mass occupying lower pelvis with homogeneously contrast enhanced solid component, displacing adjacent structures [(a) coronal view, (b) sagittal view].

histopathology was consistent with the radiologic diagnosis.

(mature cystic teratomas are on average 7 cm) and (e) they may be solid or have a prominent solid component with cystic elements.

Comment

Mature cystic teratoma (dermoid cyst) is the most common ovarian mass in children. Immature teratomas are also composed of tissues derived from three germ layers and they are distinguished histopathologically by the presence of immature embryonic tissues. Immature teratomas are not known to arise from mature cystic teratomas. Their main differences from mature cystic teratomas are: (a) They demonstrate clinically malignant behaviour, (b) they affect a younger age group (usually before adulthood), (c) they are much less common (1% of ovarian teratomas), (d) they are typically larger

References

1. OUTWATER EK, SIEGELMAN ES, HUNT JL. Ovarian teratomas: Tumor types and imaging characteristics. *Radiographics* 2001, 21:475–490

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Diagnosis: Mature cystic teratoma (dermoid cyst)

